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## **I. Potential References of Interest**

### **A. Dialog**

14/3K/18 (Item 14 from file: 349)  
DIALOG(R)File 349: PCT FULLTEXT  
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00788801

### **MONTAGE FOR AUTOMATED MARKET SYSTEM MONTAGE POUR SYSTEME D'EXCHANGE AUTOMATISE**

#### **Patent Applicant/Patent Assignee:**

- **THE NASDAQ STOCK MARKET INC**  
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#### **Patent Applicant/Inventor:**

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#### **Legal Representative:**

- **MALONEY Denis G (agent)**  
Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110-2804; US

	<b>Country</b>	<b>Number</b>	<b>Kind</b>	<b>Date</b>
Patent	WO	200122315	A2-A3	20010329
Application	WO	2000US25658		20000919
Priorities	US	99401875		19990923

**Designated States:** (Protection type is "Patent" unless otherwise stated - for applications prior to 2004)

AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG,  
BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE,  
DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,  
MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,  
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,  
TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,  
YU, ZA, ZW

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

#### **Detailed Description:**

...next highest level as above). With another alternative, the market maker could execute the balance of the order at a negotiated price.

Market participants can **direct orders** to a particular **market maker** or **ECN** through accessing the current quote montage 74 of the window 70. **Directed orders** will not be subject to automatic execution, but rather delivered to a **quoting market participant** for - 11 execution. The quoting participant will have the option of executing, rejecting, or negotiating with the order, as is commonly done now in the...

16/3,K/4 (Item 1 from file: 613)  
DIALOG(R)File 613: PR Newswire  
(c) 2012 PR Newswire Association Inc. All rights reserved.

00433841 20001011NYW013 (USE FORMAT 7 FOR FULLTEXT)  
**Bloomberg Tradebook Releases Nasdaq's Richard Ketchum Letter Dated September 27.**

PR Newswire  
Wednesday , October 11, 2000 08:30 EDT  
**Journal Code:** PR **Language:** ENGLISH **Record Type:** FULLTEXT **Document Type:** NEWSWIRE  
**Word Count:** 3,437

#### **Text:**

...to take all necessary steps to ensure that reserve size information submitted to Nasdaq will remain confidential.

As currently proposed, SuperMontage does not permit a **directed order** to be sent to an auto-**execution** participant unless the **order** exceeds by 100 shares or more the auto-**execution** participant's published size. We understand that certain market participants may wish to be able to send a referenced order for the published quotation size followed by a directed, **non-liability order** of any size, inviting the auto-**execution** participant to **trade** in that size. Nasdaq will identify a way for this functionality to be provided, consistent with SEC approval.

6. ORDER DELIVERY RISK  
To maintain market...

23/3,K/4 (Item 1 from file: 624)  
DIALOG(R)File 624: McGraw-Hill Publications  
(c) 2012 McGraw-Hill Co. Inc. All rights reserved.

00899791

**REPORT INDICATES NASD TRYING TO PRESERVE MARKET MAKER PRIVILEGES**

HW

Securities Week , Vol. 24, No. 44 , Pg 1

November 3, 1997

**Journal Code:** SW

**ISSN:** 0149-3582

**Word Count:** 624

**Text:**

...execution during the day, while unexecuted market orders will be returned to the firm, according to the report.

Moreover, the NASD may allow participants to **enter "non-directed orders"** into Next Nasdaq that will interact with the best order or quote in a price/time sequence, while permitting **"directed orders"** to be sent to a specific **market maker** without interacting with orders in the limit order file. The report also noted that the NASD plans to eliminate the SOES rule that prohibits the...

23/3,K/7 (Item 1 from file: 636)

DIALOG(R)File 636: Gale Group Newsletter DB(TM)

(c) 2012 Gale/Cengage. All rights reserved.

04837665 **Supplier Number:** 66768399 **(USE FORMAT 7 FOR FULLTEXT)**

**SUPERMONTAGE OFFERS PRICE/TIME OR PRICE/SIZE PRIORITY.(Brief Article)**

Kouwe, Zachery

Wall Street Letter , v 32 , n 45 , p 1

Nov 6 , 2000

**Language:** English **Record Type:** Fulltext

**Article Type:** Brief Article

**Document Type:** Newsletter ; Professional Trade

**Word Count:** 434

...allows the order provider to specify that they want orders matched according to share size rather than to the first posted quote. In addition, for **non-directed orders**, broker/dealers will have the choice to **submit orders** anonymously to all market participants. This is seen as a boon to **market makers** since customers often used **ECNs** for the anonymity they provide, However, the Nasdaq

23/3,K/11 (Item 1 from file: 267)

DIALOG(R)File 267: Finance & Banking Newsletters

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04571309

**Nasdaq Dismisses Monopoly' Claims: Berkeley: ECNs Will Have 460 Market Maker Competitors**

William Hoffman

Traders

October 1,2000 **Document Type:** NEWSLETTER

**Publisher:** SECURITIES DATA PUBLISHING

(c) SECURITIES DATA PUBLISHING All Rts. Reserv.

**Text:**

...in alternative ways than they can at present," said Alfred R. Berkeley III, vice chairman of the Nasdaq Stock Market, in a recent statement. "The **ECNs** are going to have 450 new competitors." Berkeley added, "We have come to a set of solutions that are very pro-competitive for the investor..."

...side firms, individual investors, and brokerages." But not all industry participants agree. "The supermontage is a sort of a back-door, sly way of undercutting **ECNs**," said John J. Wheeler, manager of equity trading at American Century Investment Management, in Kansas City, Mo. "We are always forced to choose between equal..."

...orders from Nasdaq members and regional exchanges first. "We view that as a huge disadvantage to our shareholders," he added. The supermontage will collect the **market orders** and **marketable limit orders** of **market makers**, **ECNs**, UTP specialists and **order entry** firms and match them against the **bids** and **offers** displayed in a so-called Order Display Facility. Market participants will no longer send their orders directly to one another. Instead, Nasdaq will operate as a sort of gatekeeper, controlling the flow and **execution of orders**. All **orders** will be matched on price and time priority. Features include automatic execution; display of the three best price levels instead of just one; trades of...

...orders.

Nasdaq Stands Firm

Berkeley, countering claims that the supermontage will transform Nasdaq into a monopolist, said that if the assertions of "two or three **ECNs**" are examined closely, the truth is revealed. These **ECNs**, he contended, have "an oligopoly position because of a quirk in the order handling rules that often cause **market makers** to send limit orders to **ECNs**." That's at the heart of the issue. Nasdaq is "trying to open up limit orders to competition," Berkeley said. Nasdaq claims it has acceded to many **ECN** concerns, so far posting seven amendments to its original, November 1999, proposal. One of the latest would give **ECN orders** the same **place** in the **order processing** queue as participants who don't charge a fee, providing the **ECN** either includes its fee in its quote, or the **ECN** tells Nasdaq that the price improvement offered by the displayed quote exceeds the hidden quote access fee the **ECN** charges. Another amendment would give investors the opportunity to direct or preference certain orders to particular **market makers** or **ECNs**, providing the **market maker** or **ECN** agrees to accept those **orders** through a **directed order process**.

## B. Additional Resources Searched

Financial Times FullText (via ProQuest): No relevant results.

Internet & Personal Computing Abstracts (via EBSCOhost): No relevant results.

## **II. Inventor Search Results from Dialog**

11/3K/1 (Item 1 from file: 348)  
DIALOG(R)File 348: EUROPEAN PATENTS  
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01746632

### **Quote/order processing in electronic market system**

Bearbeitung von Kurs- bzw. Auftragseingaben in einem elektronischen Marktsystem  
Traitement de cotes/ordres dans un systeme de transactions electroniques

#### **Patent Assignee:**

- **The Nasdaq Stock Market, Inc.** (2518714)  
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(Applicant designated States: all)

#### **Inventor:**

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#### **Legal Representative:**

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	Country	Number	Kind	Date	
Patent	EP	1429270	A1	20040616	(Basic)
Application	EP	2003078756		20000920	
Priorities	US	401873		19990923	

#### **Designated States:**

AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;  
GR; IE; IT; LI; LU; MC; NL; PT; SE

**Related Parent Numbers: Patent (Application):** EP 1305728 (EP 2000984518)

**Specification:** ...makers or other markets. In this embodiment, orders of broker/dealers are not posted as quotes. ORDER COLLECTOR FACILITY

Referring to FIG. 2A, the quote/order collector facility 20 receives quotes, liability orders, (non-liability orders) and directed orders from market participants. The quote/order collector facility 20 allows a quote/order to be displayed in the market, and also allows for marketable orders to be executed or routed to market participants.

The order quote collector facility 20 also includes an interface 21 that couples the order collector facility 20 to a plurality of order delivery systems. For example... ...allows Quoting Market Participants to advertise their buying or selling interest. To

access a specific quote in the current quote montage, a market participant will **enter** into the OCF 25 a "**directed order**" to begin the negotiation **process** with a particular **Quoting Market Participant**. A **directed order** is one that is routed by the market participant **entering the order** to a specific MMID. To limit the possibility for dual liability, a **directed order** must be designated as: 1) All-or-None ("AON") and at least 100 shares greater than the size of the displayed quote of the market participant to which the quote is directed; or 2) a **Minimum Acceptable Quantity order** ("MAQ") with an MAQ value of at least 100 shares greater than the displayed amount of the quote of the participant to which the order is directed. If a **Quoting Market Participant** is at the inside or displaying (attributable or non-attributable) interest in the montage and **receives** a directed, **non-Liability Order** that the participant wishes to **fill**, to avoid double liability the **Quoting Market Participant** may "request a cancel" of its displayed quote/order in System 20 before it **fills** the **non-Liability Order**. System 20 will not decrement a quote upon the delivery of a **non- Liability Order**.

11/3K/2 (Item 1 from file: 349)  
 DIALOG(R)File 349: PCT FULLTEXT  
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00788818

## LOCKED/CROSSED QUOTE HANDLING GESTION DE COTES BLOQUEES/CROISEES

### Patent Applicant/Patent Assignee:

- **THE NASDAQ STOCK MARKET INC**  
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### Patent Applicant/Inventor:

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- **MALITZIS John**  
 2127 California Street, N.W., Washington, DC 20008; US; US(Residence); US(Nationality); (Designated only for: US)
- **KETCHUM Richard G**  
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- **MARTYN Peter**  
 417 Overbrook Road, Ridgewood, NJ 07450; US; US(Residence); US(Nationality); (Designated only for: US)

### Legal Representative:

- **MALONEY Denis G (agent)**  
 Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110-2804; US

	Country	Number	Kind	Date
Patent	WO	200122332	A2-A3	20010329
Application	WO	2000US26148		20000922
Priorities	US	99401892		19990923

**Designated States:** (Protection type is "Patent" unless otherwise stated - for applications prior to 2004)  
 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG,

BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE,  
DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,  
MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,  
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,  
TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,  
YU, ZA, ZW

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;  
GR; IE; IT; LU; MC; NL; PT; SE;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML;  
MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;  
UG; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

#### **Detailed Description:**

#### ORDER COLLECTOR FACILITY

To access a specific quote in the current quote montage, a market participant will **enter** into the OCF 25 a "**directed order**" to begin the negotiation **process** with a particular **Quoting Market Participant**. A **directed order** is one that is routed by the market participant **entering** the **order** to a specific MMID. To limit the possibility for dual liability, a **directed order** must be designated as: 1) All or-None ("AON") and at least 100 shares greater than the size of the displayed quote of the market participant to which the quote is directed; or 2) a **Minimum Acceptable Quantity order** ("MAQ") with an MAQ value of at least 100 shares greater than the displayed amount of the quote of the participant to which the order is directed. If a **Quoting Market Participant** is at the inside or displaying (attributable or non-attributable) interest in the montage and receives a directed, **non-Liability Order** that the participant wishes to **fill**, to avoid double liability the **Quoting Market Participant** may "request a cancel" of its displayed quote/order in System 20 before it **fills** the **non-Liability Order**. System 20 will not decrement a quote upon the delivery of a **non- Liability Order**.

9/5/3 (Item 2 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
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0013244801 *Drawing available*  
WPI Acc no: 2003-329989/200331  
XRPX Acc No: N2003-264098

**Electronic market such as Nasdaq Stock Market delivers order as liability or non-liability order in accordance with selection of quoting market participant to receive directed order**

Patent Assignee: FRANKS D B (FRAN-I); FURBUSH D (FURB-I); KETCHUM R G (KETC-I); MALITZIS J (MALI-I); MARTYN P (MART-I); MORAN T P (MORA-I)

Inventor: FRANKS D B; FURBUSH D; KETCHUM R G; MALITZIS J; MARTYN P; MORAN T P

Patent Family ( 1 patents, 1 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030009414	A1	20030109	US 2001903390	A	20010709	200331	B

Priority Applications (no., kind, date): US 2001903390 A 20010709

Patent Details					
Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20030009414	A1	EN	27	9	

### Alerting Abstract US A1

NOVELTY - A client station enters a **directed order** to begin a negotiation process with selected quoting market participant. A server system receives and delivers the order as a liability or **non-liability order** in accordance with how the selected quoting market participant chooses to receive **directed orders**.

DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

1. security trading method in electronic market; and
2. security trading program in electronic market.

USE - Electronic market such as **Nasdaq stock market**.

ADVANTAGE - Gives a choice to quoting market participant to designate whether the quoting market participant receives **directed order** as liability or non-liability, and **then performs** negotiation or delivery of execution.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of market system.

**Title Terms** /Index Terms/Additional Words: ELECTRONIC; MARKET; STOCK; DELIVER; ORDER; LIABLE; NON; ACCORD; SELECT; PARTICIPATING; RECEIVE; DIRECT

### Class Codes

International Patent Classification					
IPC	Class Level	Scope	Position	Status	Version Date
G06Q-0040/00	A	I		R	20060101
G06Q-0040/00	C	I		R	20060101

**ECLA:** G06Q-040/00B

**US Classification, Current Main:** 705-037000

**US Classification, Issued:** 70537

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05A2F; T01-N01A1; T01-N01A2; T01-N01A2B; T01-S03

9/5/4 (Item 3 from file: 350)

DIALOG(R)File 350; Derwent WPIX

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0013244800 *Drawing available*

WPI Acc no: 2003-329988/200331

XRPX Acc No: N2003-264097

**Electronic market such as Nasdaq stock market executes order against displayed contra side interest or delivers order for executing based on participation of contra side interest in market**

Patent Assignee: FRANKS D B (FRAN-I); FURBUSH D (FURB-I); KETCHUM R G (KETC-I); MALITZIS J (MALI-I); MARTYN P (MART-I); MORAN T P (MORA-I)

Inventor: FRANKS D B; FURBUSH D; KETCHUM R G; MALITZIS J; MARTYN P; MORAN T P

Patent Family ( 1 patents, 1 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030009413	A1	20030109	US 2001903389	A	20010709	200331	B

Priority Applications (no., kind, date): US 2001903389 A 20010709

Patent Details					
Patent Number	Kind	Lang	Pgs	Draw	Filing Notes
US 20030009413	A1	EN	27	9	

### Alerting Abstract US A1

**NOVELTY** - A client station enters an order that is related to particular quoting market participant. A server system includes a queue that stores the entered order along with other orders. The server system executes the order against displayed contra side interest or delivers the order for executing based on participation of contra side interest in the market.

**DESCRIPTION** - INDEPENDENT CLAIMS are included for the following:

1. securities trading method; and
2. computer program product for trading securities.

**USE** - Electronic market such as Nasdaq stock market for trading securities.

**ADVANTAGE** - The orders that is related with the quoting market share some functionality with **market orders** and are delivered to **automatically execute** quote/order of designated market participant. Allows **market** participant to enter **directed order** by clicking in a **quote** in the current quote montage.

**DESCRIPTION OF DRAWINGS** - The figure shows the block diagram of the electronic market system.

**Title Terms /Index Terms/Additional Words:** ELECTRONIC; MARKET; STOCK; EXECUTE; ORDER; DISPLAY; CONTRA; SIDE; INTEREST; DELIVER; BASED; PARTICIPATING

### Class Codes

International Patent Classification					
IPC	Class Level	Scope	Position	Status	Version Date
G06Q-0040/00	A	I		R	20060101
G06Q-0040/00	C	I		R	20060101

**ECLA:** G06Q-040/00B

**US Classification, Current Main:** 705-037000

**US Classification, Issued:** 70537

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05A2B; T01-J05A2F; T01-N01A2B; T01-N01A2C; T01-S03

### **III. Text Search Results from Dialog**

#### **A. Full-Text Databases**

File 20:Dialog Global Reporter 1997-2012/Jun 04  
(c) 2012 Dialog  
File 15:ABI/Inform(R) 1971-2012/Jun 02  
(c) 2012 ProQuest Info&Learning  
File 610:Business Wire 1999-2012/Jun 04  
(c) 2012 Business Wire.  
File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire  
File 613:PR Newswire 1999-2012/Jun 04  
(c) 2012 PR Newswire Association Inc  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
File 634:San Jose Mercury Jun 1985-2012/Jan 28  
(c) 2012 San Jose Mercury News  
File 624:McGraw-Hill Publications 1985-2012/Jun 04  
(c) 2012 McGraw-Hill Co. Inc  
File 9:Business & Industry(R) Jul/1994-2012/Jun 01  
(c) 2012 Gale/Cengage  
File 275:Gale Group Computer DB(TM) 1983-2012/Jun 01  
(c) 2012 Gale/Cengage  
File 621:Gale Group New Prod.Annou.(R) 1985-2012/Jun 01  
(c) 2012 Gale/Cengage  
File 636:Gale Group Newsletter DB(TM) 1987-2012/May 30  
(c) 2012 Gale/Cengage  
File 16:Gale Group PROMT(R) 1990-2012/May 29  
(c) 2012 Gale/Cengage  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 148:Gale Group Trade & Industry DB 1976-2012/May 30  
(c) 2012 Gale/Cengage  
File 348:EUROPEAN PATENTS 1978-201222  
(c) 2012 European Patent Office  
File 349:PCT FULLTEXT 1979-2012/UB=20120524|UT=20120517  
(c) 2012 WIPO/Thomson  
File 625:American Banker Publications 1981-2008/Jun 26  
(c) 2008 American Banker  
File 268:Banking Info Source 1981-2012/May W3  
(c) 2012 ProQuest Info&Learning  
File 626:Bond Buyer Full Text 1981-2008/Jul 07  
(c) 2008 Bond Buyer  
File 267:Finance & Banking Newsletters 2008/Sep 29  
(c) 2008 Dialog

Set	Items	Description
S1	12399	(DIRECT OR DIRECTED) (W) ORDER? ?
S2	12956	(LIABILITY OR NON() DIRECTED OR MARKET OR MARKETABLE() LIMIT) (W) ORDER? ?

S3 74 (NON() LIABILITY OR ALL (1W) NOTHING OR AON OR MINIMUM (W)  
ACCEPTABLE (W) QUANTITY) (W) ORDER? ?

S4 3500993 QUOTING (W) MARKET (W) PARTICIPANT? ? OR ELECTRONIC (W)  
COMMUNICATION (W) NETWORK? ? OR ECN OR ECNS OR MARKET (W) MAKER? ? OR ALTERNATIVE  
(W) TRADING (W) (SYSTEM? ? OR NETWORK? ?) OR ATS OR ATSS OR INSTINET OR ISLAND OR  
INET OR ARCHIPELAGO OR BRUT

S5 15234349 (EXECUT? OR PROCESS??? OR TRIGGER??? OR INITIAT??? OR START??? OR  
LAUNCH??? OR FILL??? OR FULFIL? OR COMPLET??? OR PLAC??? OR ENTER??? OR ENTRY OR  
INPUT? OR INPUTTING OR SUBMIT? OR RECEIV?) (10N) (TRADE OR TRADES OR ORDER OR  
ORDERS OR BID OR BIDS OR OFFER OR OFFERS OR TRANSACTION? ?)

S6 1307 AU=(FURBUSH, D? OR FURBUSH D? OR FURBUSH (1N) (D OR DEAN) OR  
KETCHUM, R? OR KETCHUM R? OR KETCHUM (1N) (R OR RICHARD) OR FRANKS, D? OR FRANKS D?  
OR FRANKS (1N) (D OR DANIEL) OR MALITZIS, J? OR MALITZIS J? OR MALITZIS (1N) (J OR  
JOHN) OR MORAN, T? OR MORAN T? OR MORAN (1N) (T OR THOMAS) OR MARTYN, P? OR MARTYN  
P? OR MARTYN (1N) (P OR PETER))

S7 331382 IC=(G06F OR G06Q)

S8 86 S1 (S) S2  
S9 14 S8 (S) S3  
S10 14 S9 (S) S4-S5  
S11 5 S10 FROM 348,349  
S12 473 S1 (S) S2-S4  
S13 27 S12 FROM 348,349  
S14 22 S13 NOT S11  
S15 9 S10 NOT S11  
S16 6 RD (unique items)  
S17 446 S12 NOT S13  
S18 0 S17 FROM 348,349  
S19 143 S17 NOT PY>2001  
S20 83 RD (unique items)  
S21 54 S20 (S) S5  
S22 12 S21 (S) (S2 OR S3)  
S23 11 S22 NOT S16  
S24 0 S23 FROM 348,349  
S25 6 S6 AND S1  
S26 1 S25 NOT S11

14/3K/1 (Item 1 from file: 348)  
DIALOG(R)File 348: EUROPEAN PATENTS  
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03505962

**Method, computer system and computer program product for conducting demand-based trading**  
Verfahren, Computersystem und Computerprogrammprodukt zur Leitung von Handel auf Anfragebasis  
Procede, systeme informatique et produit de programme informatique pour effectuer un commerce en fonction de la demande

**Patent Assignee:**

- **Longitude, Inc.** (100168670)  
Two Hudson Place; Hoboken, New Jersey 07030 (US)  
(Applicant designated States: all)

**Inventor:**

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3 East 84th Street Apt. 3; New York, NY 10028; (US)

**Legal Representative:**

- **Beetz & Partner (101195541)**  
Patentanwalte Steinsdorfstrasse 10; D-80538 Munchen; (DE)

	Country	Number	Kind	Date	
Patent	EP	2278547	A2	20110126	(Basic)
Patent	EP	2278547	A3	20110413	
Application	EP	10179561		20020909	
Priorities	US	950498		20010910	

**Designated States:**

AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
FI; FR; GB; GR; IE; IT; LI; LU; MC; NL;  
PT; SE; SK; TR

**Related Parent Numbers: Patent (Application):EP 1573429 (EP 2002766350)**

2. (2) Risk management for real economic activity. State governments, municipalities, insurance companies, and...order differently. Referring the MSFT example illustrated in Table 6.1.1 and Table 6.2.1 above, assume that a trader has placed a **market order** (conditional or limit orders are described in detail below) to "sell" the digital put with strike price equal to 50. Ignoring transaction costs, the "price... ...that would be suffered should the 50 digital put expire in the money (i.e., 50 and below). For example, if a trader places a **market order** to "sell" 1,000,000 value units of the 50 strike digital put, this 1,000,000 value units are interpreted as the net loss... ...states. These methods and systems can be used to arrive at an equilibrium exclusively in the presence of limit orders, exclusively in the presence of **market orders**, and in the presence of both. In a preferred embodiment, the steps to compute a DBAR DOE equilibrium for a group of contingent claims including... ...by the trader, (including equal payouts in the case of digital options), within a tolerable degree of deviation.

(5) Conversion of filled limit orders to **market orders** for the respective filled quantities and recalculating the equilibrium does not materially change the equilibrium.

14/3K/5 (Item 1 from file: 349)  
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01630508

**ROUTING OF ORDERS IN EQUITY OPTIONS BY MEANS OF A PARAMETERIZED RULES-BASED ROUTING TABLE**

ROUTAGE D'ORDRES DANS LE MARCHE DES OPTIONS SUR ACTIONS AU MOYEN D'UNE TABLE DE ROUTAGE PARAMETRISÉE BASEE SUR DES RÈGLES

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**Legal Representative:**

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	Country	Number	Kind	Date
Patent	WO	200827124	A2-A3	20080306
Application	WO	2007US16571		20070724
Priorities	US	2006834327		20060728

**Designated States:** (All protection types applied unless otherwise stated - for applications 2004+)

AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;  
BH; BR; BW; BY; BZ; CA; CH; CN; CO; CR;  
CU; CZ; DE; DK; DM; DO; DZ; EC; EE; EG;  
ES; FI; GB; GD; GE; GH; GM; GT; HN; HR;  
HU; ID; IL; IN; IS; JP; KE; KG; KM; KN;  
KP; KR; KZ; LA; LC; LK; LR; LS; LT; LU;  
LY; MA; MD; ME; MG; MK; MN; MW; MX; MY;  
MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL;  
PT; RO; RS; RU; SC; SD; SE; SG; SK; SL;  
SM; SV; SY; TJ; TM; TN; TR; TT; TZ; UA;  
UG; US; UZ; VC; VN; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;  
LV; MC; MT; NL; PL; PT; RO; SE; SI; SK;  
TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;  
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;  
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

**Detailed Description:**

...determine if it should route or not. If no away market quotes are superior, then the incoming buy order executes against resident orders and/or **market maker** quotes first. It should be noted that the processing related to incoming **market maker** quotes, incoming working orders, incoming **directed orders**, and **market maker** entitlements are not described in detail herein because they are not central to the operation of this invention and are described elsewhere.

14/3K/6 (Item 2 from file: 349)  
DIALOG(R)File 349: PCT FULLTEXT  
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01627552

## **RESERVE ORDER IN AN ELECTRONIC GUARANTEED ENTITLEMENT ENVIRONMENT** **ORDRE CACHE DANS UN ENVIRONNEMENT ELECTRONIQUE A DROITS GARANTIS**

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	<b>Country</b>	<b>Number</b>	<b>Kind</b>	<b>Date</b>
Patent	WO	200824172	A2-A3	20080228
Application	WO	2007US16718		20070725
Priorities	US	2006834327		20060728

**Designated States:** (All protection types applied unless otherwise stated - for applications 2004+)

AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;  
BH; BR; BW; BY; BZ; CA; CH; CN; CO; CR;

CU; CZ; DE; DK; DM; DO; DZ; EC; EE; EG;  
ES; FI; GB; GD; GE; GH; GM; GT; HN; HR;  
HU; ID; IL; IN; IS; JP; KE; KG; KM; KN;  
KP; KR; KZ; LA; LC; LK; LR; LS; LT; LU;  
LY; MA; MD; ME; MG; MK; MN; MW; MX; MY;  
MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL;  
PT; RO; RS; RU; SC; SD; SE; SG; SK; SL;  
SM; SV; SY; TJ; TM; TN; TR; TT; TZ; UA;  
UG; US; UZ; VC; VN; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;  
LV; MC; MT; NL; PL; PT; RO; SE; SI; SK;  
TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;  
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;  
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

#### **Detailed Description:**

...aspect of the present invention, the method may include determining if the incoming reserve order is too executable and may also include providing an appointed **market maker** in the option series in addition to the lead **market maker**, wherein the incoming reserve order is from a specified order sending firm and is directed to and designates the appointed **market maker**. The method may include determining if the order sending firm is permissioned to **direct orders** to the designated **market maker**. Wherein if the order sending firm does have permission to **direct orders** to the designated **market maker**, the method may include determining if the designated **market maker** has a quote at the NBBO and if the designated **market maker** has a quote at the NBBO, computing an allocation percentage for the designated **market maker**. The method may then further include matching the incoming reserve order up to the lesser of the total size of the reserve order or the computed allocation percentage amount for the designated **market maker**.

#### **Claims:**

...determining if the incoming reserve order is too executable.

14. The reserve order trading method of claim 1, further comprising: providing at least one appointed **market maker** in the option series in addition to the lead **market maker**; wherein the incoming reserve order is from a specified order sending firm and is directed to and designates the at least one appointed **market maker**; determining if the order sending firm is permissioned to **direct orders** to the designated **market maker**; wherein if the order sending firm does have permission to **direct orders** to the designated **market maker**, determining if the designated **market maker** has a quote at the NBBO; wherein if the designated **market maker** has a quote at the NBBO, computing an allocation percentage for the designated **market maker**; matching the incoming reserve order up to the lesser of the total size of the reserve order or the computed allocation percentage amount for the designated **market maker**.

15. The reserve order trading method of claim 14, further comprising, prior to computing the designated market maker allocation percentage: determining if the order book... ...lead market maker has a quote at the NBB.

36. The reserve order trading method of claim 24, further comprising: providing at least one appointed **market maker** in the option series in addition to the lead **market maker**; wherein the incoming order is from a specified order sending firm and is directed to and designates the at least one appointed **market maker**; determining if the order sending firm is permissioned to

direct orders to the designated **market maker**; wherein if the order sending firm does have permission to **direct orders** to the designated **market maker**, determining if the designated **market maker** has a quote at the NBBO; wherein if the designated **market maker** has a quote at the NBBO, computing an allocation percentage for the designated **market maker**; matching the incoming order up to the lesser of the total size of the incoming order or the computed allocation percentage amount for the designated **market maker**.

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01616426

## **DISPLAYED AND DARK EQUITY OPTIONS ELECTRONIC ORDER BOOK WITH MARKET MAKER PARTICIPATION**

CARNET D'ORDRES ELECTRONIQUE POUR OPTIONS D'ACHAT D'ACTIONS AFFICHEES ET NOIRES AVEC PARTICIPATION DES TENEURS DE MARCHE

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- **WERTS Jon**  
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### **Legal Representative:**

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Milbank, Tweed, Hadley & McCloy LLP, 1 Chase Manhattan Plaza, New York, NY 10005; US

	<b>Country</b>	<b>Number</b>	<b>Kind</b>	<b>Date</b>
Patent	WO	200813776	A2-A3	20080131
Application	WO	2007US16572		20070724
Priorities	US	2006834327		20060728

**Designated States:** (All protection types applied unless otherwise stated - for applications 2004+)

AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;  
BH; BR; BW; BY; BZ; CA; CH; CN; CO; CR;  
CU; CZ; DE; DK; DM; DO; DZ; EC; EE; EG;  
ES; FI; GB; GD; GE; GH; GM; GT; HN; HR;  
HU; ID; IL; IN; IS; JP; KE; KG; KM; KN;

KP; KR; KZ; LA; LC; LK; LR; LS; LT; LU;  
LY; MA; MD; ME; MG; MK; MN; MW; MX; MY;  
MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL;  
PT; RO; RS; RU; SC; SD; SE; SG; SK; SL;  
SM; SV; SY; TJ; TM; TN; TR; TT; TZ; UA;  
UG; US; UZ; VC; VN; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;  
LV; MC; MT; NL; PL; PT; RO; SE; SI; SK;  
TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;  
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;  
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

**English Abstract:**

An enhanced system and method for executing options trades are disclosed. The lead **market maker** entitlements are integrated with sophisticated order types, including dark order types, so that the lead market maker is guaranteed an allocation of the trade if the lead **market maker** is at the NBBO when an order priced at or better than the NBBO is received. The lead **market maker** is not provided an opportunity to price improve to execute with a specific incoming order. Additionally, **market makers** who are not the lead **market maker** in an option series may be granted the privileges of a lead **market maker** for the purpose of executing with a specific incoming **directed order** if the designated **market maker** is at the NBBO when a **directed order** priced at or better than the NBBO is received. The system and method disclosed encourages **market makers** to quote the best price possible, which in turn has the effect of narrowing spreads. Furthermore, as only displayed orders at the NBBO are eligible to execute ahead of **market makers** quoting at the NBBO, the system and method encourages users to display their best prices and sizes to the marketplace.

14/3K/8 (Item 4 from file: 349)  
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01616388

**DISCRETIONARY ORDER IN AN ELECTRONIC GUARANTEED ENTITLEMENT ENVIRONMENT**  
**ORDRE A L'APPRECIATION DANS UN ENVIRONNEMENT ELECTRONIQUE A DROITS GARANTIS**

**Patent Applicant/Patent Assignee:**

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100 South Wacker Drive, Suite 1800, Chicago, IL 60606; US; US (Residence); US (Nationality); (For all designated states except: US)

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- **FARNSTROM Amy**  
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- **HILL Robert**  
c/o NYSE ARCA, 100 South Wacker Drive, Suite 1800, Chicago, IL 60611; US; US (Residence); US (Nationality); (Designated only for: US)

**Legal Representative:**

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	Country	Number	Kind	Date
Patent	WO	200813916	A2-A3	20080131
Application	WO	2007US16856		20070727
Priorities	US	2006834327		20060728

**Designated States:** (All protection types applied unless otherwise stated - for applications 2004+)

AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;  
BH; BR; BW; BY; BZ; CA; CH; CN; CO; CR;  
CU; CZ; DE; DK; DM; DO; DZ; EC; EE; EG;  
ES; FI; GB; GD; GE; GH; GM; GT; HN; HR;  
HU; ID; IL; IN; IS; JP; KE; KG; KM; KN;  
KP; KR; KZ; LA; LC; LK; LR; LS; LT; LU;  
LY; MA; MD; ME; MG; MK; MN; MW; MX; MY;  
MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL;  
PT; RO; RS; RU; SC; SD; SE; SG; SK; SL;  
SM; SV; SY; TJ; TM; TN; TR; TT; TZ; UA;  
UG; US; UZ; VC; VN; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;  
LV; MC; MT; NL; PL; PT; RO; SE; SI; SK;  
TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;  
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;  
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

**Detailed Description:**

[0037] In the non-competing **market maker** embodiment, described herein, **market maker** quotes cannot be automatically or manually improved for the purpose of participating with a specific incoming order, nor can a **market maker** send a price-improving order for the purpose of intercepting a specific incoming order. In this embodiment, **market makers** do not see an incoming order at all. As a result, a user of this system that sends an order is able to trade anonymously without divulging his or her trading intentions. Another characteristic of this non-competing **market maker** embodiment, as described below, is that only the lead **market maker** (or alternatively, a specific, designated non-lead **market maker** who is temporarily granted lead **market maker** privileges in a **directed order** process) is entitled to guaranteed participation with an incoming order, and therefore complex **market maker** pro rata allocations, as used in prior systems, are not necessary in this embodiment.

[0038] Referring specifically to Fig. 2, in this embodiment, market makers... ...21a receives and processes fully-displayed orders and partially-displayed orders. When presented with a marketable incoming order, the display order routine 21a ranks disseminated **market maker** quotes and resting displayed orders or portions thereof according to strict price/time priority. The display order routine 21a, in this embodiment, includes the following sub-routines: a **directed order** routine 21d and a lead **market maker** guarantee routine 21e. The **directed order** routine 21d is a routine that, when initiated, guarantees a specified percentage of an incoming **directed order** to a designated **market maker** after customer orders ranked ahead of the designated **market maker**'s quote execute first. The lead **market maker** routine 21e is a routine that, when initiated, guarantees a specified percentage of an incoming **non-directed order** to a lead **market maker** after customer orders ranked ahead of the lead **market maker**'s quote execute first.

14/3K/9 (Item 5 from file: 349)  
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01616145

## **DIVERSE OPTIONS ORDER TYPES IN AN ELECTRONIC GUARANTEED ENTITLEMENT ENVIRONMENT** **TYPES D'ORDRES SUR OPTIONS MULTIPLES DANS UN ENVIRONNEMENT ELECTRONIQUE A DROITS** **GARANTIS**

### **Patent Applicant/Patent Assignee:**

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- **HILL Robert**  
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	Country	Number	Kind	Date
Patent	WO	200813917	A2-A3	20080131
Application	WO	2007US16857		20070727
Priorities	US	2006834327		20060728

**Designated States:** (All protection types applied unless otherwise stated - for applications 2004+)

AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;  
 BH; BR; BW; BY; BZ; CA; CH; CN; CO; CR;  
 CU; CZ; DE; DK; DM; DO; DZ; EC; EE; EG;  
 ES; FI; GB; GD; GE; GH; GM; GT; HN; HR;  
 HU; ID; IL; IN; IS; JP; KE; KG; KM; KN;  
 KP; KR; KZ; LA; LC; LK; LR; LS; LT; LU;  
 LY; MA; MD; ME; MG; MK; MN; MW; MX; MY;  
 MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL;  
 PT; RO; RS; RU; SC; SD; SE; SG; SK; SL;  
 SM; SV; SY; TJ; TM; TN; TR; TT; TZ; UA;  
 UG; US; UZ; VC; VN; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
 FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;  
 LV; MC; MT; NL; PL; PT; RO; SE; SI; SK;  
 TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;  
 ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;  
 SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

#### **Detailed Description:**

[0009] According to another aspect of the present invention, the method may include, prior to computing the lead **market maker** allocation percentage, determining if the order book has a displayed customer order at the NBBO that was posted earlier than the lead **market maker**'s quote, and matching the incoming order with the at least one customer order. According to yet another aspect of the invention, the method may also have a **market maker** appointed in the option series in addition to the lead **market maker**. Wherein if the incoming order is from a specified order sending firm and is directed to and designates the appointed **market maker** and if the order sending firm does have permission to **direct orders** to the designated **market maker**, the designated **market maker** receives the same privileges as the lead **market maker** for the purpose of executing with the incoming order up to the computed allocation percentage amount, if the designated **market maker** has a quote at the NBBO.

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01495172

**DIRECTED ORDER**  
ORDRE DIRIGE

**Patent Applicant/Patent Assignee:**

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	Country	Number	Kind	Date
Patent	WO	200738084	A2-A3	20070405
Application	WO	2006US36461		20060919
Priorities	US	2005720164		20050923

**Designated States:** (All protection types applied unless otherwise stated - for applications 2004+)

AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;  
BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU;  
CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI;  
GB; GD; GE; GH; GM; HN; HR; HU; ID; IL;  
IN; IS; JP; KE; KG; KM; KN; KP; KR; KZ;  
LA; LC; LK; LR; LS; LT; LU; LV; LY; MA;  
MD; MG; MK; MN; MW; MX; MY; MZ; NA; NG;  
NI; NO; NZ; OM; PG; PH; PL; PT; RO; RS;  
RU; SC; SD; SE; SG; SK; SL; SM; SV; SY;  
TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ;  
VC; VN; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;  
LV; MC; NL; PL; PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;  
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;  
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

**English Abstract:**

A **directed order** process and related market center are disclosed, wherein a market center grants permission to order sending firms to send **directed order** flow to participating designated **market makers**. Such designated **market makers** create a virtual guarantee order book for each permissioned order sending firm. If an order sending firm sends a **directed order** to the market center that is marketable against a virtual guarantee order, then the market center automatically pairs the orders in a two- sided directed...

14/3K/11 (Item 7 from file: 349)  
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01439364

**PASSIVE LIQUIDITY ORDER**  
**ORDRE DE LIQUIDITE PASSIF**

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**Patent Applicant/Inventor:**

- **ADCOCK Paul D**  
8562 Clynderven Road, Burr Ridge, Illinois 60527; US; US (Residence); US (Nationality); (Designated only for: US)
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237 Leitch Avenue, LaGrange, Illinois 60525; US; US (Residence); US (Nationality); (Designated only for: US)

**Legal Representative:**

- **LEFEVOUR Martin Thomas (agent)**  
Lefevour Law Group, LLC, 4365 Lawn Avenue, Suite 5, Western Springs, Illinois 60558; US

	Country	Number	Kind	Date
Patent	WO	2006121691	A2-A3	20061116
Application	WO	2006US16701		20060502
Priorities	US	2005678634		20050506

**Designated States:** (All protection types applied unless otherwise stated - for applications 2004+)

AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;  
BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU;  
CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI;  
GB; GD; GE; GH; GM; HR; HU; ID; IL; IN;  
IS; JP; KE; KG; KM; KN; KP; KR; KZ; LC;  
LK; LR; LS; LT; LU; LV; LY; MA; MD; MG;  
MK; MN; MW; MX; MZ; NA; NG; NI; NO; NZ;  
OM; PG; PH; PL; PT; RO; RU; SC; SD; SE;  
SG; SK; SL; SM; SY; TJ; TM; TN; TR; TT;  
TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM;  
ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;  
LV; MC; NL; PL; PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;  
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;  
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

#### **Detailed Description:**

Example: Ranking of Passive Liquidity Orders in the **Directed Order** Process [00641] This example illustrates the priority of a Passive Liquidity Order compared to a **Market Maker**'s Directed Fill in an equities trading environment. In this example, a **Market Maker** has a standing instruction with the posting market center 20 that the order matching engine 21 automatically generate a Directed Fill in response to a marketable **Directed Order** received from a permissioned user. For the purposes of this example, a Directed Fill has a size and price specified by the **Market Maker**.

14/3K/12 (Item 8 from file: 349)  
DIALOG(R)File 349: PCT FULLTEXT  
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01438670

#### **TRACKING LIQUIDITY ORDER** **ORDRE DE LIQUIDITE DE SUIVI**

#### **Patent Applicant/Patent Assignee:**

- **ARCHIPELAGO HOLDINGS INC**  
100 SOUTH WACKER DRIVE, Suite 1800, Chicago, IL 60606; US; US (Residence); US (Nationality); (For all designated states except: US)

#### **Patent Applicant/Inventor:**

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1707 Sunwood Drive, Longwood, FL 32779; US; US (Residence); US (Nationality); (Designated only for: US)
- **HILL Robert A**  
237 Leitch Avenue, Lagrange, IL 60525; US; US (Residence); US (Nationality); (Designated only for: US)

**Legal Representative:**

- **LEFEVOUR Martin Thomas (agent)**  
LEFEVOUR LAW GROUP, LLC, 4365 Lawn Avenue, Suite 5, Western Springs, IL 60558; US

	Country	Number	Kind	Date
Patent	WO	2006121796	A2-A3	20061116
Application	WO	2006US17253		20060502
Priorities	US	2005678020		20050505

**Designated States:** (All protection types applied unless otherwise stated - for applications 2004+)

AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;  
BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU;  
CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI;  
GB; GD; GE; GH; GM; HR; HU; ID; IL; IN;  
IS; JP; KE; KG; KM; KN; KP; KR; KZ; LC;  
LK; LR; LS; LT; LU; LV; LY; MA; MD; MG;  
MK; MN; MW; MX; MZ; NA; NG; NI; NO; NZ;  
OM; PG; PH; PL; PT; RO; RU; SC; SD; SE;  
SG; SK; SL; SM; SY; TJ; TM; TN; TR; TT;  
TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM;  
ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;  
LV; MC; NL; PL; PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;  
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;  
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

**Detailed Description:**

**Market Maker** Processes L00281 If an issue has appointed **Market Makers**, the posting market center may also support a **Lead Market Maker** Guarantee Process and/or a **Directed Order** Process, wherein such processes would precede the Display Process and have the highest matching priority. **Market Maker** quotes not eligible for execution in the **Lead Market Maker** Guarantee Process or the **Directed Order** Process are eligible for execution in the Display Process instead, where the quotes are ranked in strict price/time priority with displayed limit orders on the book even though they reside in separate tables. The matching priority of Tracking Liquidity Orders in relation to **Market Maker** quotes is described in this document and illustrated by means of several examples.

14/3K/14 (Item 10 from file: 349)  
DIALOG(R)File 349: PCT FULLTEXT

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01182953

**AUTOMATED SYSTEM FOR ROUTING ORDERS FOR FINANCIAL INSTRUMENTS**  
SYSTEME AUTOMATISE DE TRANSMISSION D'ORDRES POUR INSTRUMENTS FINANCIERS

**Patent Applicant/Patent Assignee:**

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**Inventor(s):**

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11 Pfizer Drive, Gladstone, NJ 07934; US; (Designated for all)

**Legal Representative:**

- **DAVIDSON Clifford M et al (agent)**  
Davidson, Davidson & Kappel, LLC, 485 Seventh Avenue, 14th Floor, New York, NY 10018; US

	Country	Number	Kind	Date
Patent	WO	2004104791	A2-A3	20041202
Application	WO	2004US1595		20040121
Priorities	US	2003441750		20030520

**Designated States:** (All protection types applied unless otherwise stated - for applications 2004+)

AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;  
BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU;  
CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI;  
GB; GD; GE; GH; GM; HR; HU; ID; IL; IN;  
IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR;  
LS; LT; LU; LV; MA; MD; MG; MK; MN; MW;  
MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL;  
PT; RO; RU; SC; SD; SE; SG; SK; SL; SY;  
TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ;  
VC; VN; YU; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;  
PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;  
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; SD; SL; SZ;

TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

**Detailed Description:**

...against visible liquidity (e.g., market data) or undisclosed liquidity (e.g., as generated in Figure 15) by sending an order to an Exchange or **ATS**; (ii) as a user-to-user **direct order** against an ITT 401 received at 8110; (iii) as an **ATS** order against an ITT 401 received at 8110; or (iv) as an ITT 401.

[01441 This determination could be made on a... ...could first hit or take any reciprocal visible or undisclosed liquidity (option (i)), and then send any remaining undisclosed liquidity as a user-to-user **direct order** (option (ii)) against a reciprocal ITT, unless the undisclosed liquidity is ineligible for user-to-user direct trades in accordance with system or user policy... ...be sent out to permissioned users (option (iv)). Alternatively, the system could be configured to first seek user-to-user direct trades (option (ii)) or **ATS**/ITT orders (option (iii)), and then visible or undisclosed liquidity (option (i)). Other schemes can also be implemented.

16/3,K/1 (Item 1 from file: 20)  
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41078750

**The Trade-Through Rule Must Go**

Robert A. Schwartz  
SECURITIES INDUSTRY NEWS  
March 08, 2005

**Journal Code:** TSIN **Language:** English **Record Type:** FULLTEXT  
**Word Count:** 1948

-  
...types. The Commission should not focus on them at the expense of other order types and conditions (e.g., the NH, CAP, hidden, FOK and **AON orders**). Moreover, trade-through protection is not the only way to encourage a greater use of limit orders. Another approach is to handle limit **orders** so that, like **market orders**, they may **receive** price improvement. Limit **orders** are first posted and then subsequently **executed** if and when marketable contra-side **orders** arrive. With prepositioning, it is possible to identify the party to a **trade** that initially established a price, and the party that subsequently **triggered** the **trade**. Price is the primary rule of **order execution** in our markets and, with limit **order** book trading, time can be used as the secondary rule of **order execution**. Time priority is operable, however, only for **orders** that are prepositioned. But not all orders are prepositioned. Some trades are negotiated. The NYSE has historically been more of a negotiated market. On the...

...order book market (even though the Big Board will more nearly become one with its development of Direct+), and the NYSE's secondary rules of **order execution** make only limited use of time priority. A **trade**-through prohibition is not appropriate in an environment where many orders are not prepositioned, where some orders have special conditions attached to them, and where...

16/3,K/2 (Item 2 from file: 20)  
DIALOG(R)File 20: Dialog Global Reporter  
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**22043027 (USE FORMAT 7 OR 9 FOR FULLTEXT)**

**NASDAQ: Nasdaq announces SuperMontage pricing; New trading platform on schedule for third quarter launch**

M2 PRESSWIRE

April 02, 2002

**Journal Code: WMPR Language: English Record Type: FULLTEXT**

**Word Count: 763**

**(USE FORMAT 7 OR 9 FOR FULLTEXT)**

...per share if the executing firm charges an access fee on SuperMontage executions.

2 No rebate to members that charge an access fee on SuperMontage **executions**.

3 Includes cancel portion of immediate-or-cancel **orders**.

Directed **Orders** (Liability and **Non-Liability Orders**)

**Order Entry** \$0.10 per **order Order**

**Execution** \$0.0025 per share **executed (entering** party only) Cancellation \$0.10 per cancel (canceling party only) Quotes/Orders and Summary Quotes (i.e., Quotes and Non-Marketable Orders) Entry No charge...

16/3,K/3 (Item 3 from file: 20)  
DIALOG(R)File 20: Dialog Global Reporter  
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**22041898 (USE FORMAT 7 OR 9 FOR FULLTEXT)**

**Nasdaq Announces SuperMontage Pricing**

PR NEWSWIRE

April 02, 2002

**Journal Code: WPRW Language: English Record Type: FULLTEXT**

**Word Count: 744**

**(USE FORMAT 7 OR 9 FOR FULLTEXT)**

...per share if the executing firm charges an access fee on SuperMontage executions. (2) No rebate to members that charge an access fee on SuperMontage **executions**.

(3) Includes cancel portion of immediate-or-cancel **orders**. Directed **Orders** (Liability and **Non-Liability Orders**) **Order Entry** \$0.10

per **order Order Execution** \$0.0025 per share

**executed (entering** party only) Cancellation \$0.10 per cancel (canceling party only) Quotes/**Orders** and Summary Quotes (i.e., Quotes and Non-Marketable **Orders**) **Entry** No charge Change

Caused by the SuperMontage System (Price or Size) No charge Cancel/Replace at Price with Size Enhancement No charge Cancel/Replace at...

16/3,K/5 (Item 1 from file: 9)  
DIALOG(R)File 9: Business & Industry(R)  
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03583920 Supplier Number: 128598065 (**USE FORMAT 7 OR 9 FOR FULLTEXT**)

**The Trade-Through Rule Must Go.**

(**securities industry**)

Securities Industry News

February 14, 2005

**Document Type:** Journal **ISSN:** 1089-6333 ( United States )

**Language:** English **Record Type:** Fulltext

**Word Count:** 1945 (**USE FORMAT 7 OR 9 FOR FULLTEXT**)

**TEXT:**

Two orders meeting in a trade do not, by themselves, discover price. Price discovery is a dynamic **process** that operates in the context of other recent **transactions**, current quotes, and a richer tapestry of the expressed and latent interest of a broad array of participants. Consequently, the rules, systems and protocols for...

...in this context. Integration of Order Flow Order flow integration is straightforward in a perfectly competitive, order driven environment where only plain vanilla limit and **market orders** are used, where all limit **orders** are **placed** on a single book, and where no individual participant is large enough to have market power. In such an environment, **orders** can be **executed** with reference to strict price and time priority, and the orderliness that regulatory authorities are seeking can be achieved. But the world is not so simply structured. Some participants are huge and have market power. A multiplicity of **order** conditions and types exist--**fill** or kill (FOK), all-or-nothing (AON), not-held (NH), convert and parity (CAP), hidden (reserve or iceberg), and so forth. Different market centers compete...

...basis of the procedures they use for handling them. While individual trading facilities have rules and procedures that address the complexities of integrating their own **order** flow, the **trade-through** proposal is an intermarket **order execution** rule. The complexities of **order** integration are compounded in the intermarket setting. Any intermarket trade-through rule, with all its necessary conditions and exemptions, is unduly restrictive. Moreover, recognizing that...

...not relevant, and anonymity is not needed. Consequently, one would not expect the retail customer to have a personal motive for trading through a posted **order** and **executing** at an inferior price. Retail **order** flow also deserves special consideration because of its importance for price discovery. While large institutional participants typically work their orders over extended periods of time...

...restrictive for larger customers. Previous commentary, however, has emphasized the difficulties in achieving workable opt-out criteria. A different path had best be followed. For **non-directed** **orders**, brokers select the **execution** venue on behalf of their customers. Brokers have a best **execution** obligation to send their customer **orders** to the market that has the best price. Broker actions can be monitored using the SEC 11Ac1-6 broker reports that provide information on the routing of **non-directed orders**. If 11Ac1-6 is thought to be too porous, the wisest path is to address its

shortcomings directly rather than using trade-through prohibition as a backstop. Free-Riding Free-riding on displayed prices does have a negative side. From the perspective of a limit **order placer**, an **order** that has played an active role in price discovery can go unexecuted. From the perspective of an exchange, trades can be made off-market at...

...a major function of a marketplace. While a market center such as the NYSE may play the dominant role with regard to price discovery, an **ATS** such as Liquidnet or ITG's Posit can play a major role with regard to quantity discovery. These systems do so by enabling large buyers and sellers to meet directly. An **ATS**'s quantity discovery role can beneficially effect price discovery for the broader marketplace. If restrictions are **placed** on how large buy **orders** can meet large sell **orders** away from a primary market center, price dislocations can occur. That is, elephants that are not able to trade with each other can upset the apple cart (or, some might say, the alpha cart) and cause a sharp accentuation of intra-day price volatility. A large trade made in an **ATS** or by an upstairs **market maker** can validate the price discovery of a major market via the price certification that a large print implies. Even if the large print is outside the NBBO, price discovery for the broad market may be improved. Allowing an **ATS** to trade through the NBBO provides the flexibility needed to achieve both price and quantity discovery. Protection of Limit Orders The Commission is wise to...

...backbone of an order driven market. Such a market may be viewed as an ecology within which participants naturally separate into two groups, one which **submits** limit **orders** (and, in so doing, supplies liquidity), and the other which **submits market orders** that are liquidity seeking (and thus enable the limit **orders** to **execute**). An important argument set forth by the Commission is that the trade-through rule encourages the placement of limit orders, and that this will enhance...

...types. The Commission should not focus on them at the expense of other order types and conditions (e.g., the NH, CAP, hidden, FOK and **AON orders**). Moreover, trade-through protection is not the only way to encourage a greater use of limit orders. Another approach is to handle limit **orders** so that, like **market orders**, they may **receive** price improvement. Limit **orders** are first posted and then subsequently **executed** if and when marketable contra-side **orders** arrive. With prepositioning, it is possible to identify the party to a **trade** that initially established a price, and the party that subsequently **triggered** the **trade**. Price is the primary rule of **order execution** in our markets and, with limit **order** book trading, time can be used as the secondary rule of **order execution**. Time priority is operable, however, only for **orders** that are prepositioned. But not all orders are prepositioned. Some trades are negotiated. The NYSE has historically been more of a negotiated market. On the...

...order book market (even though the Big Board will more nearly become one with its development of Direct+), and the NYSE's secondary rules of **order execution** make only limited use of time priority. A **trade**-through prohibition is not appropriate in an environment where many orders are not prepositioned, where some orders have special

conditions attached to them, and where...

16/3,K/6 (Item 1 from file: 636)  
DIALOG(R)File 636: Gale Group Newsletter DB(TM)  
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05239489 **Supplier Number:** 84347687 **(USE FORMAT 7 FOR FULLTEXT)**

**Nasdaq announces SuperMontage pricing; New trading platform on schedule for third-quarter launch.**  
M2 Presswire , p NA

April 2 , 2002

**Language:** English **Record Type:** Fulltext

**Document Type:** Newswire ; Trade

**Word Count:** 862

-  
...per share if the executing firm charges an access fee on SuperMontage executions.

2 No rebate to members that charge an access fee on SuperMontage **executions**.

3 Includes cancel portion of immediate-or-cancel **orders**.

Directed **Orders** (Liability and **Non-Liability**  
**Orders**)

**Order Entry** \$0.10 per **order Order**

**Execution** \$0.0025 per share **executed (entering** party  
only) Cancellation \$0.10 per cancel (canceling party only) Quotes/Orders  
and Summary Quotes (i.e., Quotes and Non-Marketable Orders) Entry No  
charge...

23/3,K/1 (Item 1 from file: 20)  
DIALOG(R)File 20: Dialog Global Reporter  
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19339573 **(USE FORMAT 7 OR 9 FOR FULLTEXT)**  
**iFinancial Offers Timely Trade Order Flow and Reporting Solution**

PR NEWSWIRE

October 16, 2001

**Journal Code:** WPRW **Language:** English **Record Type:** FULLTEXT

**Word Count:** 494

**(USE FORMAT 7 OR 9 FOR FULLTEXT)**

...making and execution venues.

Mr. Israel continued, "Contrary to our competitors, iFinancial has developed proprietary software that enables us to identify and extract the required **non**-directed **order** information from all **execution** venues, including clearing firms.

Kenneth Israel, President & CEO has had significant experience providing compliance solutions. He founded Exchange Resources, Inc. (ERI) in 1989. ERI provided...

23/3,K/2 (Item 1 from file: 15)  
DIALOG(R)File 15: ABI/Inform(R)

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02111613 66643203

### **Big board breakthroughs**

Anonymous

Wall Street & Technology v19n1 pp: 14-17

Jan 2001

**ISSN: 1060-989X Journal Code: WSC**

**Word Count: 2645**

#### **Text:**

...the member's client, then Direct+ is the more appropriate option.

On average, it takes a NYSE specialist approximately 22 seconds to price improve an **order**. In contrast, Burkhardt expects a **Direct+** **order** to get **executed** in just a few seconds," roundtrip. However, pre-decimalization, an NYSE specialist working a **market order** was able to get

23/3,K/3 (Item 1 from file: 613)

DIALOG(R)File 613: PR Newswire

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00658722 20011016HSTU006 (USE FORMAT 7 FOR FULLTEXT)

**iFinancial Offers Timely Trade Order Flowrren Communictnss**

PR Newswire

Tuesday, October 16, 2001 16:48 EDT

**Journal Code: PR Language: ENGLISH Record Type: FULLTEXT Document Type: NEWSWIRE**

**Word Count: 509**

#### **Text:**

...introduction of a cost-effective reporting solution for the financial industry. The Company's SOFT(TM) (Securities Order Flow Transactions) system will enable broker-dealers, **market makers** and clearing firms to comply with the newly required U.S. Securities and Exchange Commission (SEC) rules 11Ac1-6 and 11Ac1-5 **order** flow routing, **execution**, and "soft dollar" **transactions**.

The new SEC rules require all securities firms to make extensive quarterly reports on their order routing practices publicly available. The reports provide information on the routing of "non-directed **orders**" -- which include all orders that customers have not specifically instructed to be routed to a particular venue for execution. The SEC requires such reports to...

...November 1, 2001. The mandated quarterly reports on order routing are intended to provide both a general overview and a

detailed accounting of broker-dealers' **order** flow routing and **execution** practices, and of soft dollar arrangements with market making and execution venues.

Mr. Israel continued, "Contrary to our competitors, iFinancial has developed proprietary software that enables us to identify and extract the required **non-directed order** information from all **execution** venues, including clearing firms.

Kenneth Israel, President & CEO has had significant experience providing compliance solutions. He founded Exchange Resources, Inc. (ERI) in 1989. ERI provided...

23/3,K/5 (Item 2 from file: 624)  
DIALOG(R)File 624: McGraw-Hill Publications  
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00815949

**NASDAQ INTRODUCING NEW RULES TO COMPLY WITH SEC ORDER HANDLING RULES**

Securities Week , Vol. 23., No. 46 , Pg 4

November 18, 1996

**Journal Code:** SW

**Section Heading:** NASDAQ Rules **ISSN:** 0149-3582

**Word Count:** 392

**Text:**

...ECNs without the need for counter-offered--so that when a directed limit order is sent to an ECN and the ECN's quote represents **orders** at a rounded price, the **ECN** will **execute** at the improved price without the need for the counter-offer process that currently exists in SelectNet.

7. Eliminate the SOES limit **order** file, allowing only **marketable limit orders**.

8. Allow market makers to enter agency orders into SOES.

9. Return SOES orders to the order-entry firm when an ECN or UTP specialist...

23/3,K/6 (Item 1 from file: 275)  
DIALOG(R)File 275: Gale Group Computer DB(TM)  
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02476135 **Supplier Number:** 70391676 **(Use Format 7 Or 9 For FULL TEXT )**  
**Big Board Breakthroughs.(Company Operations)**

Sales, Robert  
Wall Street & Technology , 19 , 1 , 14  
Jan , 2001

ISSN: 1060-989X

**Language:** English **Record Type:** Fulltext  
**Word Count:** 2829 **Line Count:** 00215

...the member's client, then Direct+ is the more appropriate option.

On average, it takes a NYSE specialist approximately 22 seconds to price improve an **order**. In contrast, Burkhardt expects a **Direct+ order** to get **executed** in "just a few seconds," roundtrip. However, pre-decimalization, an NYSE specialist working a **market order** was able to get a better price than the best bid or offer for a stock one-third of the time-and that percentage is...

23/3,K/8 (Item 2 from file: 636)  
DIALOG(R)File 636: Gale Group Newsletter DB(TM)  
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04016040 **Supplier Number:** 53220660 **(USE FORMAT 7 FOR FULLTEXT)**

**SCHWAB ASKS SEC TO DELAY NEXT NASDAQ DECISION.**

Wall Street Letter , p 7(1)

June 8 , 1998

**Language:** English **Record Type:** Fulltext  
**Document Type:** Newsletter ; Professional Trade  
**Word Count:** 327

...WSL, 6/1). The Securities Industry Association has also expressed concerns that mirror Schwab's, and is pushing an alternative plan that would have Nasdaq **market makers** behave more like exchange specialists by **executing non-directed orders** in a rotation system (WSL, 5/11).

23/3,K/9 (Item 3 from file: 636)  
DIALOG(R)File 636: Gale Group Newsletter DB(TM)  
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03900380 **Supplier Number:** 50072147 **(USE FORMAT 7 FOR FULLTEXT)**

**WASHINGTON: MSDW, BSE SOUND OFF ON NEXT NASDAQ**

Wall Street Letter , v 30 , n 22 , p N/A

June 1 , 1998

**Language:** English **Record Type:** Fulltext  
**Document Type:** Newsletter ; Professional Trade  
**Word Count:** 360  
**Supplier Number:** **(USE FORMAT 7 FOR FULLTEXT)**

**Text:**

...consolidate the myriad systems for handling orders on the Nasdaq Stock Market. MSDW's objections centered on a proposed three-minute delay during which exhausted **market maker** quotes would be closed off from

interacting with the rest of the market. The BSE urged the NASD to include a "trade-through" provision in Next Nasdaq that would allow **orders** in certain Nasdaq securities to be **executed** at better prices on regional exchanges. MSDW called for Next Nasdaq to refresh **market maker** quotes automatically once their quoted size has been taken out by matching bids or offers, arguing that technology exists for such a capability, which would benefit all market participants. The current proposal calls for **market maker** quotes that are decremented to zero to be placed in a closed quote state for three minutes, after which the quote is restored to a...

...urged the NASD to implement the Securities Industry Association's alternative to the central limit order book proposed under Next Nasdaq. The alternative would have **market makers** play the role of an exchange specialist by **executing non-directed orders** in a rotation system (WSL, 5/11). Jill Ostergaard, the counsel for Morgan who wrote the letter, directed calls to a spokeswoman, who declined comment. The Boston Stock Exchange's chief objection to the proposal is that it does not provide for "trade-throughs" between and among **market makers**, electronic communications networks and the limit order book. The exchange argued that this would permit **non-directed orders** to bypass superior-priced bids in the unlisted trading privilege (UTP) market. "[A]ny order ... directed or nondirected, should have an opportunity, in the form...

23/3,K/10 (Item 1 from file: 148)

DIALOG(R)File 148: Gale Group Trade & Industry DB

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0019940025 **Supplier Number:** 78394857 (USE FORMAT 7 OR 9 FOR FULL TEXT )  
**Order Routing & Execution Disclosure.**

Thompson, Shelley J.  
Compliance Reporter , 8 , 19 , 11

Sept 10 , 2001

ISSN: 1529-5669

**Language:** English

**Record Type:** Fulltext

**Word Count:** 759 **Line Count:** 00061

...relationship with those venues--such as payment for order flow arrangements--and the percentage of non-directed orders the firm routes to each venue. A **non-directed order** is one where a customer **places** an **order** without specifying which venue to send it. The percentage of **non-directed orders** does not include equity orders with a market value of at least \$200,000 or options orders for at least \$50,000, Marshall-Smith said...

## **IV. Text Search Results from Dialog**

### **A. Abstract Databases**

File 35:Dissertation Abs Online 1861-2012/May  
(c) 2012 ProQuest Info&Learning  
File 474:New York Times Abs 1969-2012/Jun 04  
(c) 2012 The New York Times  
File 475:Wall Street Journal Abs 1973-2011/Feb 14  
(c) 2011 The New York Times  
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13  
(c) 2002 Gale/Cengage  
File 65:Inside Conferences 1993-2012/Jun 01  
(c) 2012 BLDSC all rts. reserv.  
File 99:Wilson Appl. Sci & Tech Abs 1983-2011/Nov  
(c) 2012 The HW Wilson Co.  
File 2:INSPEC 1898-2012/May W4  
(c) 2012 The IET  
File 350:Derwent WPIX 1963-2011/UD=201234  
(c) 2012 Thomson Reuters  
File 347:JAPIO Dec 1976-2012/FEB(Updated 120531)  
(c) 2012 JPO & JAPIO  
File 139:EconLit 1969-2012/May  
(c) 2012 American Economic Association

Set	Items	Description
S1	490	(DIRECT OR DIRECTED) (W) ORDER? ?
S2	589	(LIABILITY OR NON()DIRECTED OR MARKET OR MARKETABLE()LIMIT) (W) ORDER? ?
S3	8	(NON()LIABILITY OR ALL (1W) NOTHING OR AON OR MINIMUM (W) ACCEPTABLE (W) QUANTITY) (W) ORDER? ?
S4	221520	QUOTING (W) MARKET (W) PARTICIPANT? ? OR ELECTRONIC (W) COMMUNICATION (W) NETWORK? ? OR ECN OR ECNS OR MARKET (W) MAKER? ? OR ALTERNATIVE (W) TRADING (W) (SYSTEM? ? OR NETWORK? ?) OR ATS OR ATSS OR INSTINET OR ISLAND OR INET OR ARCHIPELAGO OR BRUT
S5	871489	(EXECUT? OR PROCESS??? OR TRIGGER??? OR INITIAT??? OR START??? OR LAUNCH??? OR FILL??? OR FULFIL? OR COMPLET??? OR PLAC??? OR ENTER??? OR ENTRY OR INPUT? OR INPUTTING OR SUBMIT? OR RECEIV?) (10N) (TRADE OR TRADES OR ORDER OR ORDERS OR BID OR BIDS OR OFFER OR OFFERS OR TRANSACTION? ?)
S6	1200	AU=(FURBUSH, D? OR FURBUSH D? OR FURBUSH (1N) (D OR DEAN) OR KETCHUM, R? OR KETCHUM R? OR KETCHUM (1N) (R OR RICHARD) OR FRANKS, D? OR FRANKS D? OR FRANKS (1N) (D OR DANIEL) OR MALITZIS, J? OR MALITZIS J? OR MALITZIS (1N) (J OR JOHN) OR MORAN, T? OR MORAN T? OR MORAN (1N) (T OR THOMAS) OR MARTYN, P? OR MARTYN P? OR MARTYN (1N) (P OR PETER))
S7	3617278	IC=(G06F OR G06Q)

S8	4	S1 AND S2
S9	4	S1 AND S2-S3
S10	8	S1 AND S4
S11	5	S10 NOT S9
S12	17	S6 AND S1-S4
S13	15	S12 NOT (S9 OR S11)
S14	15	S13 AND S2-S4
S15	15	S14 NOT (S9 OR S11)
S16	0	S15 AND S1
S17	2	S6 AND S1
S18	0	S17 NOT S9

9/5/1 (Item 1 from file: 2)  
 DIALOG(R)File 2: INSPEC  
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09379767

**Title:** Hybrid market, myriad challenges [New York Stock Exchange automation]

**Author(s):** Middlemiss, J.

**Journal:** Wall Street & Technology , vol.22 , no.11 , pp.22-3

**Publisher:** CMP Media Inc.

**Country of Publication:** USA

**Publication Date:** Nov. 2004

**ISSN:** 1060-989X

**ISSN Type:** print

**SICI:** 1060-989X(200411)22:11L.22:HMMC;1-1

**CODEN:** WSTEE5

**Language:** English

**Document Type:** Journal Paper (JP)

**Treatment:** Practical (P)

**Abstract:** Chief technology officer Roger Burkhardt has the unenviable task of automating the New York Stock Exchange and putting it on a level playing field with electronic competitors by creating a hybrid market. The caveat is that Burkhardt must do it while preserving a key differentiator from electronic exchanges - the NYSE's floor brokers and specialists, who play an important role in stabilizing volatility and order imbalances during tumultuous markets. NYSE CEO John Thain, who filed his plan to create a blended electronic and floor-based auction market in August, is driving the move. It's Burkhardt's job to build an infrastructure that can handle the unpredictable volume that results and help floor brokers adopt the handheld technology they'll need to interact with the automated market. The NYSE's plan calls for the expansion of the NYSE **Direct + order** system, which was first launched in 2000 after Burkhardt's arrival and accounts for 10 percent of the trades executed on the exchange. The market will also undergo structural changes, such as lifting restrictions on the number of shares that can be entered into Direct + and lifting the 30-second time restriction on consecutive executions for the same order. The proposal creates a new order type, an auction limit order, designates a far-larger share of orders, including **marketable limit orders**, for automatic execution; and adds a volatility moderator called Liquidity Replenishment Points (LRP).

**Subfile(s):** D (Information Technology for Business)

**Descriptors:** electronic trading; stock markets

**Identifiers:** New York Stock Exchange; hybrid market; electronic exchanges; electronic auction market; floor-based auction market; automated market; **Direct + order** system; auction limit order; **marketable limit orders**; volatility moderator; Liquidity Replenishment Points

**Classification Codes:** D2050F (IT in financial markets)

**INSPEC Update Issue:** 2005-016

**Copyright:** 2005, IEE

9/5/2 (Item 1 from file: 350)  
 DIALOG(R)File 350: Derwent WPIX  
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0016539143 *Drawing available*  
 WPI Acc no: 2007-255370/200725  
 XRPX Acc No: N2007-189889

**Directed order crossing method for trading environment, involves matching received directed order with directed order retrieved from several guarantee orders on guarantee order book, in price and time priority, on internal book**

Patent Assignee: ARCHIPELAGO HOLDINGS INC (ARCH-N)

Inventor: CORMACK M A; DRAKE J L; HALLER T F; HILL R A

Patent Family ( 3 patents, 115 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2007038084	A2	20070405	WO 2006US36461	A	20060919	200725	B
US 20070078753	A1	20070405	US 2005720164	P	20050923	200726	E
			US 2006525363	A	20060922		
WO 2007038084	A3	20081218				200902	E

Priority Applications (no., kind, date): US 2005720164 P 20050923; US 2006525363 A 20060922

Patent Details					
Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
WO 2007038084	A2	EN	163	10	
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HN HR HU ID IL IN IS JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MY MZ NA NG NI NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SK SL SM SV SY TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW				
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
US 20070078753	A1	EN			Related to Provisional US 2005720164
WO 2007038084	A3	EN			
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HN HR HU ID IL IN IS JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MY MZ NA NG NI NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SK SL SM SV SY TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW				
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				

### Alerting Abstract WO A2

NOVELTY - The method involves receiving a **directed order** on a posting market center. A marketable contra side guarantee order is retrieved from several guarantee orders on a guarantee order book and received **directed order** is paired with retrieved order. The retrieved guarantee order is ranked in internal book, and received **directed order** is presented to internal book. The received **directed order** is matched with retrieved guarantee order in price and time priority, on internal book. **Directed order** interacts with internal book and does not cross at a price that trades through market.

DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

1. method of providing order sending firm and designated market maker anonymity in directed cross;
2. method for populating guarantee order book; and
3. posting market center.

USE - For crossing **directed order** in trading environment.

ADVANTAGE - The **direct order** processing system is integrated with and interacts with the **non-directed order** process, thereby preventing **directed orders** from executing at inferior prices. The **directed order** processing system provides market makers with more flexibility in regard to specifying the prices and sizes at which they are willing to interact with incoming **directed order** flow. The system does not divulge the presence of, nor identify the senders of such incoming **directed order** flow, thus preventing such orders from being seen or declined.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of trading environment.

**Title Terms /Index Terms/Additional Words:** DIRECT; ORDER; CROSS; METHOD; TRADE; ENVIRONMENT; MATCH; RECEIVE; RETRIEVAL; GUARANTEE; BOOK; PRICE; TIME; PRIORITY; INTERNAL

#### Class Codes

International Patent Classification					
IPC	Class Level	Scope	Position	Status	Version Date
G06Q-0040/00	A	I	F	B	20060101
G06Q-0040/00	C	I		B	20060101

**ECLA:** G06Q-030/00C4, G06Q-040/00B

**US Classification, Current** Main: 705-037000

**US Classification, Issued:** 70537

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05A1

11/5/3 (Item 1 from file: 350)

DIALOG(R)File 350: Derwent WPIX

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0017427681 *Drawing available*

WPI Acc no: 2008-C48121/200818

Related WPI Acc No: 2008-C37033; 2008-C48133; 2008-C76152; 2008-C76551; 2008-D99757

XRPX Acc No: N2008-198718

**Processing method for electronic options trading with market maker participation, involves matching incoming order to allocation percentage amount computed for lead market maker**

Patent Assignee: ARCHIPELAGO HOLDINGS INC (ARCH-N); ARMSTRONG P (ARMS-I); FAMSTROM A (FAMS-I); WERTS J (WERT-I)

Inventor: ARMSTRONG P; FARNSTROM A; WERTS J; FAMSTROM A

Patent Family ( 3 patents, 120 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2008013776	A2	20080131	WO 2007US16572	A	20070724	200818	B
WO 2008013776	A3	20080904				200859	E
US 20090125431	A1	20090514	US 2006834327	P	20060728	200934	E

		US 2007880852	A	20070724
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Priority Applications (no., kind, date): US 2006834327 P 20060728; US 2007880852 A 20070724

Patent Details					Filing Notes
Patent Number	Kind	Lan	Pgs	Draw	
WO 2008013776	A2	EN	134	13	
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BH BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DO DZ EC EE EG ES FI GB GD GE GH GM GT HN HR HU ID IL IN IS JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LY MA MD ME MG MK MN MW MX MY MZ NA NG NI NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SK SL SM SV SY TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW				
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU LV MC MT MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
WO 2008013776	A3	EN			
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BH BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DO DZ EC EE EG ES FI GB GD GE GH GM GT HN HR HU ID IL IN IS JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LY MA MD ME MG MK MN MW MX MY MZ NA NG NI NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SK SL SM SV SY TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW				
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU LV MC MT MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
US 20090125431	A1	EN			Related to Provisional US 2006834327

### Alerting Abstract WO A2

**NOVELTY** - The method involves determining if an incoming order is for an option series that has a lead **market maker**, and if the lead **market maker** has a quote at the national best bid and offer (NBBO). An allocation percentage for the lead **market maker** is computed if the lead **market maker** has a quote at the NBBO. The incoming order is matched up to the allocation percentage amount computed for the lead **market maker**.

**DESCRIPTION** - A market center has an order book for each option series and a quote book for each option series. The order book has a displayed interest component and a non-displayed interest component. The option series have an appointed lead **market maker**. An INDEPENDENT CLAIM is included for a market center.

**USE** - Trading method for electronic options with **market maker** participation.

**ADVANTAGE** - Utilizes price over time priority principles so that all orders and quotes compete equally, while providing an incentive for **market makers** to make a market in each specific option class. Encourages users of the trading system to compete against each other since more competition between orders and quotes is promoted.

**DESCRIPTION OF DRAWINGS** - The figure shows the block diagram of the architecture involved in the equity options electronic order book.

21 Order matching engine

23 Quote and last sale interface

28 Order and execution interface

32 **Market maker** interface

33 **Market maker** quote book

**Title Terms** /Index Terms/Additional Words: PROCESS; METHOD; ELECTRONIC; OPTION; TRADE; MARKET; MAKER; PARTICIPATING; MATCH; INCOMING; ORDER; ALLOCATE; PERCENTAGE; AMOUNT; COMPUTATION; LEAD

### Class Codes

International Patent Classification					
IPC	Class Level	Scope	Position	Status	Version Date
G06Q-0040/00	A	I	F	B	20060101
G06Q-0040/00	A	I	L	B	20060101
G06Q-0040/00	C	I		B	20060101
G06Q-0040/00	C	I	F	B	20060101
G06Q-0040/00	C	I	L	B	20060101

**ECLA:** G06Q-030/00C

**US Classification, Current Main:** 705-037000

**US Classification, Issued:** 70537

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-C07C; T01-F02C2

11/5/5 (Item 1 from file: 139)

DIALOG(R)File 139: EconLit

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975690

**Title:** A Model of Price, Volume, and Sequential Information

**Author:** Zhang, Gaiyan

**Author Affiliation:** U MO, St Louis

**Journal Name:** International Journal of Business and Economics ,

**Journal Volume & Issue:** 6 3 ,

**Pages:** 207-23

**Publication Date:** 2007

**Language:** English

**Availability:** <http://www.ijbe.org>

**ISSN:** 1607-0704

**Document Type:** Journal Article

**Abstract Indicator:** Abstract

**Abstract:** This paper models the relationship between price and volume by tracking their adjustment path and speed in a world with heterogeneous investors. Motivated by widely observed information leakage in the stock market and fast-growing **electronic communication networks**, the model features sequential information and **direct order** matching. I show that both the content and the dissemination speed of information are incorporated in price changes and volume accumulations simultaneously. A convergence trading strategy is proposed based on a joint statistic of price and volume, which should help to improve the timing of market entry and exit. The model offers an explanation for the mixed evidence on the relationship between price change and volume and provides several testable hypotheses.

**Descriptor(s) (1991 to present):** Asset Pricing; Trading volume; Bond Interest Rates (G120); Information and Market Efficiency; Event Studies (G140); Stock Market; Stocks

## **V. Additional Resources Searched**

Financial Times FullText (via ProQuest): No relevant results.

Internet & Personal Computing Abstracts (via EBSCOhost): No relevant results.